

Claims

We claim

1 1. An apparatus for selecting broadcast signals, the apparatus comprising:
2 a tuner for receiving a plurality of broadcast signals from a plurality
3 of broadcast sources;
4 a memory, the memory including:
5 a current location of the receiver;
6 a database of broadcast sources for a plurality of broadcast
7 locations;
8 a set of listener preferences; and
9 a processor coupled to the tuner and the memory for selecting a
10 group of broadcast signals based on a predetermined
11 selection criteria.

1 2. The apparatus of claim 1, wherein the predetermined selection criteria
2 includes the plurality of receivable broadcast signals, the current location of the
3 receiver, and the set of listener preferences.

1 3. The apparatus of claim 2, wherein the database of broadcast sources
2 further includes program formats for a plurality of broadcast locations.

1 4. The apparatus of claim 1, wherein the current location of the receiver is
2 entered by the listener.

1 5. The apparatus of claim 4, wherein the current location entered by the
2 listener is a zip code.

1 6. The apparatus of claim 4, wherein the current location entered by the
2 listener is a city code.

- 1 7. The apparatus of claim 4, wherein the current location entered by the
2 listener is a city name.
- 1 8. The apparatus of claim 4, wherein the current location entered by the
2 listener is entered via a keypad integral to the apparatus.
- 1 9. The apparatus of claim 4, wherein the current location entered by the
2 listener is entered via voice input.
- 1 10. The apparatus of claim 1, wherein the current location of the receiver is
2 provided by a global positioning system (GPS) receiver integral to the apparatus.
- 1 11. The apparatus of claim 1, wherein the current location of the receiver is
2 provided by a global positioning system (GPS) receiver external to the apparatus.
- 1 12. The apparatus of claim 1, wherein the current location of the receiver is
2 provided by a cellular phone integral to the apparatus.
- 1 13. The apparatus of claim 1, wherein the current location of the receiver is
2 provided by a cellular phone external to the apparatus.
- 1 14. The apparatus of claim 1, wherein the database of broadcast services is
2 provided to the receiver by a removable memory module.
- 1 15. The apparatus of claim 1, wherein the database of broadcast services is
2 provided to the receiver by a CD-ROM disc.
- 1 16. The apparatus of claim 1, wherein the database of broadcast services is
2 provided to the receiver by a CD-RW disc.

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17. The apparatus of claim 1, wherein the database of broadcast services is provided to the receiver by a writable DVD.
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18. The apparatus of claim 1, wherein the apparatus further includes an I/O port for transferring information from an external device to the apparatus.
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19. The apparatus of claim 18, wherein the external device is coupled to the I/O port via a wired connection.
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20. The apparatus of claim 18, wherein the external device is coupled to the I/O port via a wireless connection.
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21. The apparatus of claim 20, wherein the wireless connection is an RF connection.
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22. The apparatus of claim 20, wherein the wireless connection is an IR connection.
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23. The apparatus of claim 20, wherein the external device is a personal digital assistant (PDA).
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24. The apparatus of claim 20, wherein the external device is a personal computer (PC).
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25. The apparatus of claim 20, wherein the external device is a wireless phone.

1 26. The apparatus of claim 20, wherein the transferred information includes
2 the current location of the receiver.

1 27. The apparatus of claim 20, wherein the transferred information is passed
2 between two or more external devices prior to being passed to the I/O port of the
3 apparatus.

1 28. The apparatus of claim 20, wherein the transferred information includes
2 the database of broadcast sources and program formats.

1 29. The apparatus of claim 20, wherein the transferred information includes
2 the set of user preferences.

1 30. The apparatus of claim 29, wherein the set of user preferences includes
2 favorite program formats.

1 31. The apparatus of claim 29, wherein the set of user preferences includes
2 specific program choices.

1 32. The apparatus of claim 1, wherein the database of broadcast sources
2 comprises a plurality of broadcast source entries, each of the plurality of
3 broadcast source entries comprising: a station identifier, a station format, and a
4 station location.

1 33. The apparatus of claim 1, wherein the receiver is mounted within a mobile
2 vehicle.

1 34. The apparatus of claim 1, wherein the receiver is a hand-held device.

1 35. A method for selecting broadcast signals on a receiver, the method
2 comprising:
3 creating a set of user preferences;
4 loading the set of user preferences and a database of broadcast
5 sources into the receiver;
6 determining a location of the receiver;
7 receiving a plurality of broadcast channels from a plurality of
8 broadcast services;
9 searching the database of broadcast sources and program formats
10 based on the location of the receiver;
11 creating one or more groups of broadcast channels identified by the
12 search based on the set of user preferences; and
13 presenting the one or more groups of broadcast channels to the
14 user.

1 36. The method for selecting broadcast signals of claim 35, wherein the step
2 of determining the location of the receiver further includes:
3 receiving a global positioning service (GPS) signal; and
4 interpreting the GPS signal.

1 37. The method for selecting broadcast signals of claim 35, wherein the step
2 of determining the location of the receiver further includes:
3 receiving a location signal via a cellular phone; and
4 interpreting the location signal.

1 38. The method for selecting broadcast signals of claim 35, wherein the step
2 of determining the location of the receiver further includes:
3 receiving a location identifier code entered by a user; and
4 interpreting location identifier code.

39. The method for selecting broadcast signals of claim 35, wherein the step of searching a database of broadcast sources and program formats based on the location of the receiver further includes:

extracting a station location from each of a plurality of broadcast source entries residing within the database of broadcast sources and program formats;

comparing the station location with the location of the receiver to determine if the receiver is within receiving range of the broadcast source; and

building a list of receivable broadcast source records for all of the broadcast sources that are within receiving range.

40. The method for selecting broadcast signals of claim 35, wherein the predetermined grouping criteria includes program format.

41. The method for selecting broadcast signals of claim 35, wherein the step of presenting the one or more groups of broadcast channels to the user further includes the step of:

assigning the one or more groups of broadcast channels to one or more user selectable controls on the receiver.

- 1 42. A program product, comprising:
- 2 a program configured to determine the location of a receiver;
- 3 receive a plurality of broadcast channels from a plurality of broadcast
- 4 services; search a database of broadcast sources and program formats
- 5 based on the location of the receiver; create one or more groups of
- 6 broadcast channels identified by the search based on a predetermined
- 7 grouping criteria; and present the one or more groups of broadcast
- 8 channels to a user.